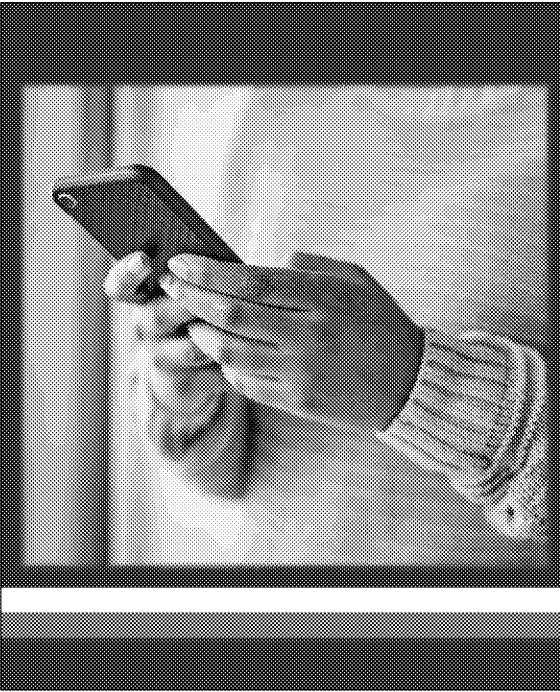


Ethylene Oxide and Risk in the Allentown, PA Community





**Use the Q and A module to
ask questions or as for
technical help.**

Why we are here today

1

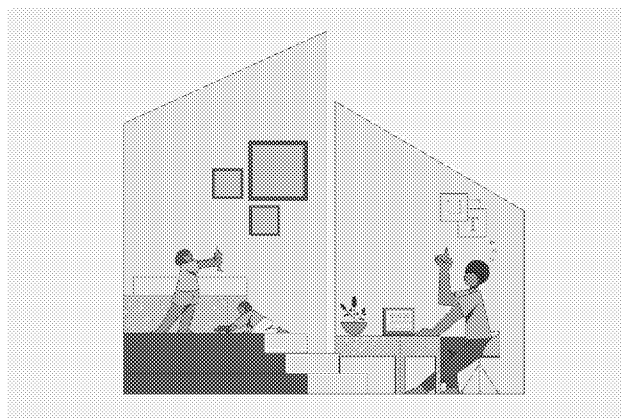
Pollution is increasing health risks in your neighborhood.

2

We are working to reduce this risk in three ways.

3

We want to hear from you.



Website:

<https://www.epa.gov/eto>

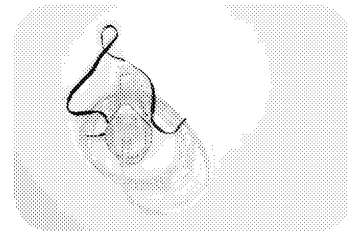
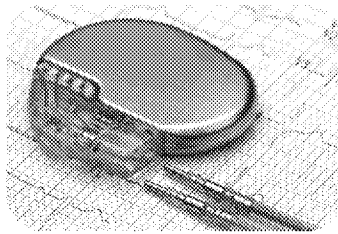
Email:

eto@epa.gov

What is Ethylene Oxide?

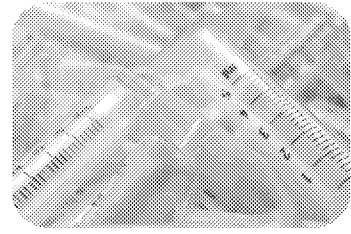
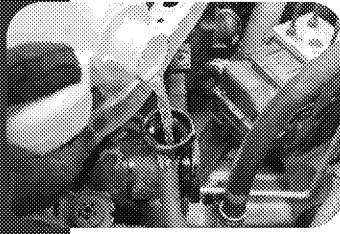
- Gas
- Colorless
- Flammable
- Odorless

*(in concentrations
we see in communities)*



EtO Uses

- Sterilizes
- Makes Other Products



No indication of risk:

- From soil or water
- Acute or emergency health impacts
- From consumer use of products made with or sterilized with EtO



Over your lifetime

Breathing in EtO over
many years can cause
breast cancer and lymph
cancer.



Special Considerations about Risk



Workers at sterilizer facilities may be exposed at higher levels.

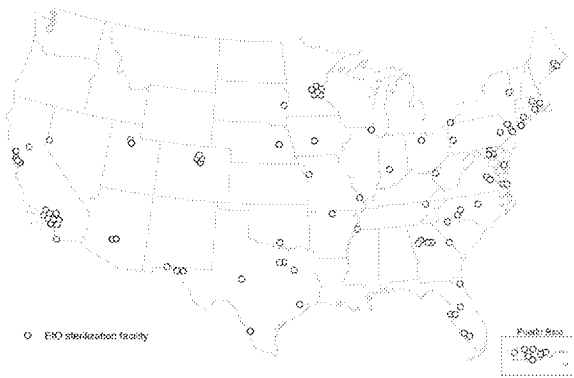


Children and babies may be at higher risk.



This risk assessment and the rule it supports are focused on community risk not worker risk.

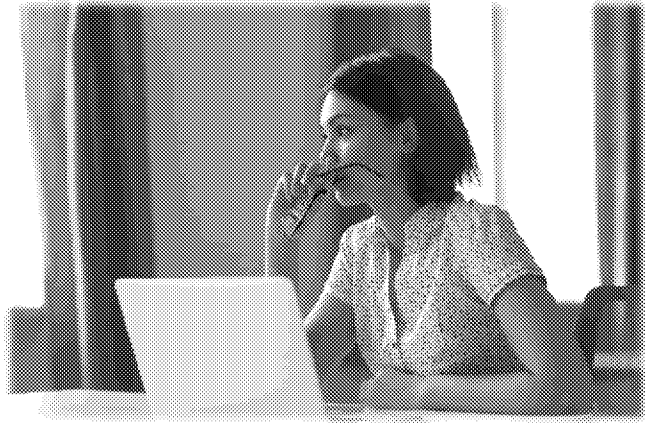
National Context



- Approximately **100** commercial sterilizers in the United States
- B. Braun **was** one of 23 with the highest risk
- More information on all facilities at <https://www.epa.gov/eto>

Understanding Risk

How close?
How much?
How long?



How long are people exposed?

- EPA takes a protective approach when we consider timelines of exposure.
- We calculate risk as though an individual would breathe the air containing EtO 24 hours a day, every day, for 70 years.



**Reducing EtO coming
out of facility is
the best way
to reduce risk.**

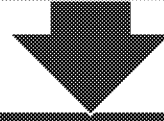


Where EtO Comes from at the Facility

There are two types of EtO
emissions from facilities:

Controlled
Emissions

Fugitive
Emissions



In this community, the majority of
the risk is being caused by fugitive
emissions.

Details about this analysis

EtO Uses
Facility Processes
Facility Equipment
Community Details
Weather

Analysis

**Mapped
Location of Risk
Caused by EtO
from a Facility**

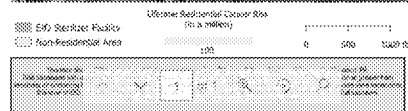
B. Braun Medical Inc. Allentown, Pennsylvania

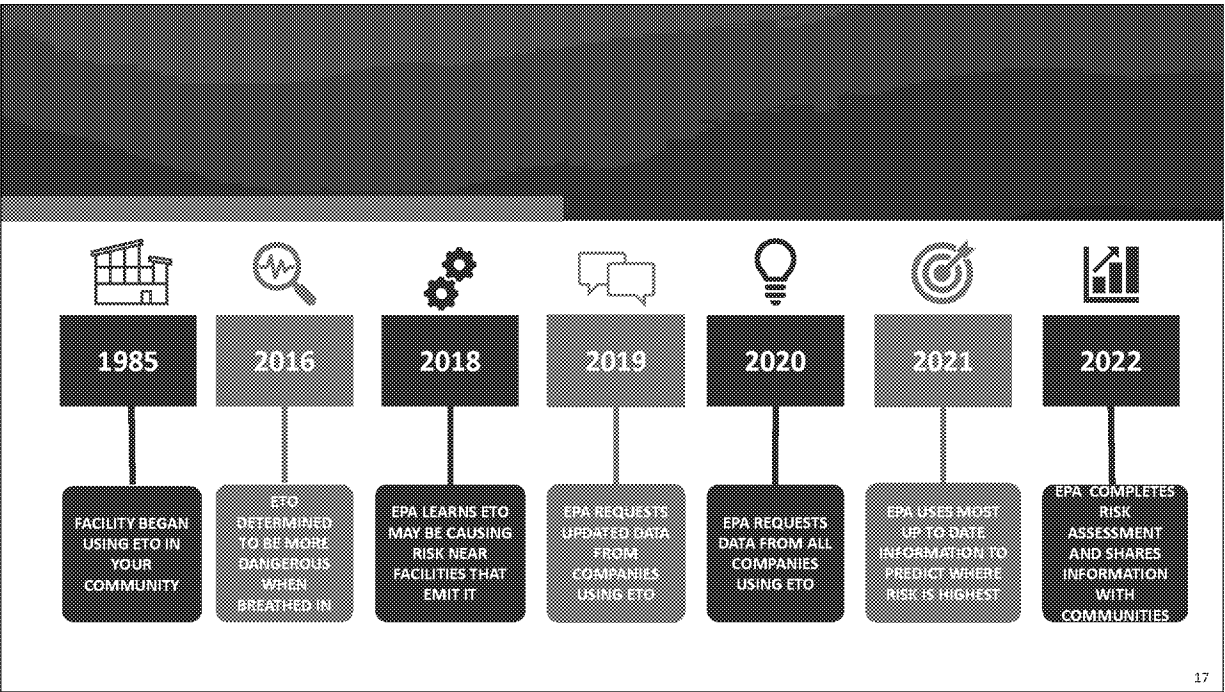
Maximum Risk Level: 100/Million

B. Braun is now below 100/million

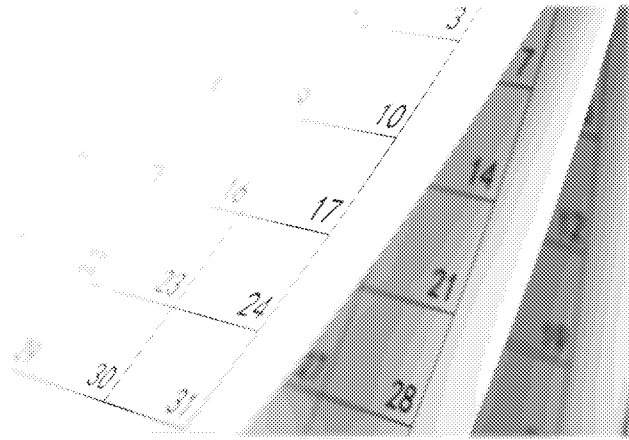
For more information and to view this map
online: <https://www.epa.gov/eto/allentown>

Lifetime Residential Cancer Risks - ETO Sterilization
B. Braun Med Inc, Allentown, PA





**We do not believe
there to be
short-term or acute
risks associated
with EtO in this
community.**





Recent Steps Taken to Learn about Risk and Reduce It:

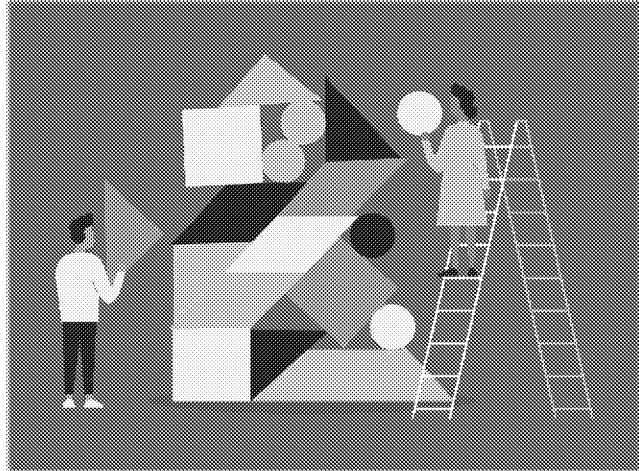
- July 2022: Complete analysis showing where, in which specific communities, risk is highest for people who live nearby.
- Continue to seek more immediate reductions of EtO coming out of facilities.

Previous work:

- 2016: Learn EtO is more dangerous when people breathe it in.
- 2018: Initial analysis showing that EtO might be causing risk near certain types of facilities.
- 2020-2022: Collect and verify data and complete analysis to understand more exactly where there is risk and why.

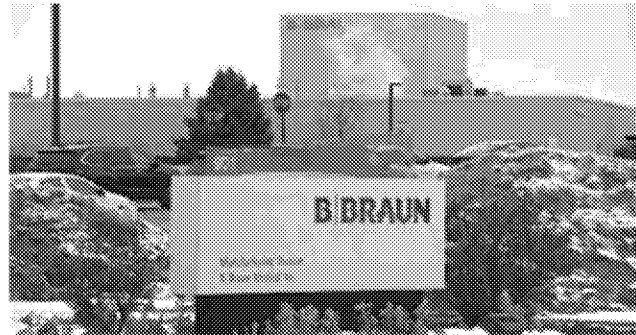
Work in Progress

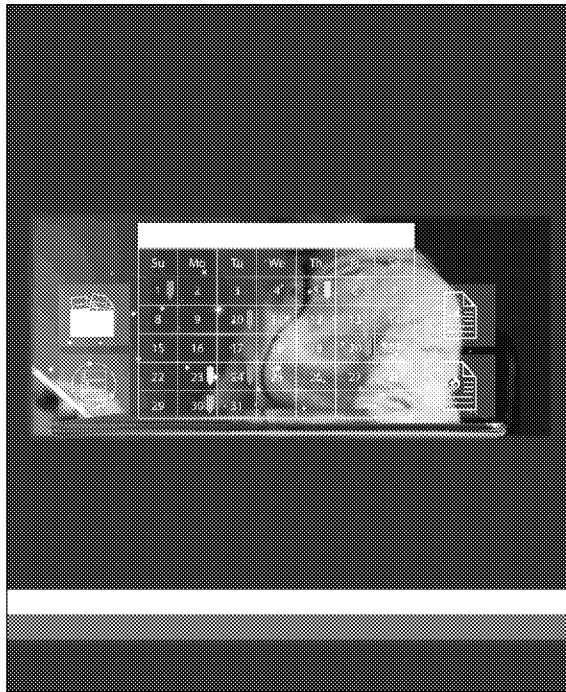
- B. Braun has voluntarily installed two control systems in 2019 and in 2020 which has reduced ETO emissions over 90% from 2018 to 2021.
- Pennsylvania Department of Environmental Protection (PADEP) conducted a full air quality inspection in June 2021 and found no compliance issues.
- PADEP will continue to conduct routine inspections to verify compliance with air quality operating conditions.



**For Updates and
to Learn More**

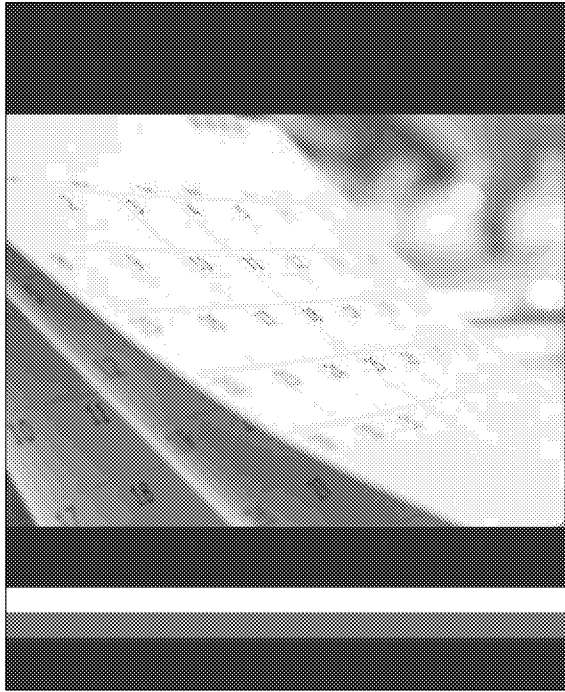
<https://www.eto/allentown>





Timeline

- New regulation to be proposed this year.
- The public comment period will last 60 days.
- Final rule is expected in 2023.
- Once the rule is final, facilities typically have 3 years to comply with new requirements.



Timeline (continued)

Additional actions this year on EtO:

- New risk information for workers at EtO facilities and people who work or attend school nearby
- Proposed changes to EtO use inside facilities expected in 2022
- Public comment period.
- Once changes are final, it typically takes several years for changes to take effect
- Learn more about EPA's review of EtO use as a pesticide: <https://www.epa.gov/ingredients-used-pesticide-products/ethylene-oxide-eto>

Key Points



EPA has learned that EtO is causing health risk in your community.

We are working to reduce this risk by:

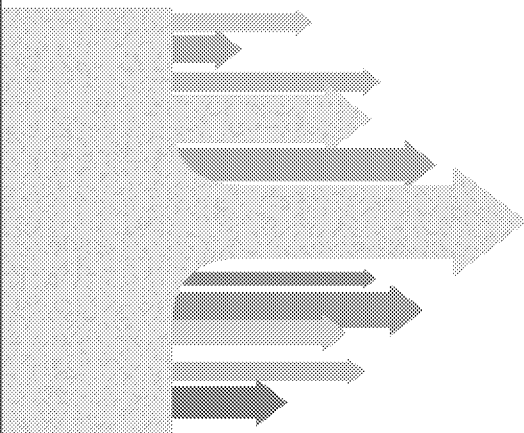
1. Working across government and industry to reduce EtO coming from American Contract Systems.
2. We are updating air pollution regulations to be more protective of your health.
3. We are sharing these risk results with you, so you have the same information we have.

How to find this information

Start with this url:
<https://www.epa.gov/eto>



Next Steps



- New regulation to be proposed by the end of the year.
- Go to <https://www.epa.gov/eto/allentown> to learn more and to sign up to receive updates.

Use Q and A
Module to type a
question.

